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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,833	08/20/2003	Grzegorz J. Kusinski	020030-000910US	7656

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TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER	
YEE, DEBORAH	

ART UNIT	PAPER NUMBER
1742	

MAIL DATE	DELIVERY MODE
08/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/645,833	Applicant(s) KUSINSKI ET AL.	
	Examiner Deborah Yee	Art Unit 1742	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 03 August 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *1-15 and 17-21*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Deborah Yee /
Primary Examiner
Art Unit: 1742

Continuation of 11. does NOT place the application in condition for allowance because:

Masumoto (US Patent 6,273,957) on lines 2 to 24 of column 6 and lines 39 to 42 in column 8 discloses forming an analogous carbon steel alloy having a microstructure of lath martensite and austenite by cooling from the molten state followed by cold working (cold rolling or drawing) without heat treatment to achieve a tensile strength as high as 400 kg/mm2 (equivalent to 568 KSI) which closely meets the recited claims.

It was argued that applicants' claim 1 recites cooling a solid carbon alloy steel having a homogeneous austenite phase with all alloying elements in solid solution whereas Matsumoto alloy is melted and then rapid quenched. Although prior art process starts cooling from the molten phase, the alloy is still subjected to cooling through the austenitic phase temperature and solidifies as it cools followed by further cooling to the martensitic phase temperature. Hence prior art would meet applicants' claim 1 step (a) wherein steel is subjected to cooling in the homogenous austenitic phase.

Even though prior art does not teach heating steel ~~steel~~ sufficiently high to cause austenitization at 1,050 to 1,170C as recited by one or more of the dependent claims, it does teach cooling from the molten state through the austenitization temperature range down to the martenstiic temperature range to form lath martensite and austenite. Since applicants have not demonstrated criticality (e.g. by comparative test data), then reheating to austenitization temperature followed by cooling verses cooling directly from the molten state to reach the austenization temperature followed by cooling would not be a patentable difference.

Applicant submitted that Matsumoto process produces stainless steel utilizing substantial amounts of alloying materials whereas the claimed process produces a carbon steel. It is the examiner's position that Matsumoto teaches a Fe-Cr alloy having constituents whose wt% ranges overlap with those recited by applicants' claim 14. Note prior art claim 1 steel can have alloying elements with a lower at% limit of 2%Ni-7.5%Cr-0.5%Al -0.5%C - 89.5%Fe and when converted to wt%, equals about 2.12%Ni-7.06%Cr-0.24%Al- 0.11%C-89.5%Fe. The prior art alloying elements have lower limit wt% ranges that are within those recited by claim 14. Hence claims are not patentably distinguish over prior art. Moreover, even though prior art alloy can have the additional elements, Ni and Al, such would not be excluded from applicants' open-ended claim reciting "comprising".

It was argued that Matsumoto does not produce steels with a dislocated lath structure of laths of martensite alternating with from about 0.5 to about 15% by volume of films of retained austenite. It is the examiner's position that since Matsumoto steel is processed in substantially the same manner as claimed by applicants, then the microstructural limitation would be expected in absence of proof to the contrary.

In regard to the rejection based on Thomas in view of Matsumoto, it was argued that the two references are not combinable because they deal with production of two different types of steels and through two different types of processes. Thomas relates to production of carbon steels, while Matsumoto relates to stainless steel. It is the examiner's position that Matsumoto does not teach a stainless steel alloy but rather a Fe-Cr alloy material containing alloying elements with lower wt% limits that overlap with those recited by Thomas steel in claims 2 to 11 and 18 to 23. Hence prior art teaches an analogous steel to Thomas. Applicants stated that the Thomas process heats up the carbon steel to a temperature at which it still is a solid followed by cooling whereas Matsumoto heats steel up to a molten state followed by cooling. Since applicants have not demonstrated criticality (e.g. by comparative test data), then reheating to austenitization temperature followed by cooling verses cooling directly from the molten state to reach the austenization temperature followed by cooling would not be a patentable difference.